

Work Order ID 57528

April 8, 2010 8:12:05 AM



Page 1

Item ID: D3535-35

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 4/08/10 Start Qty: 10.00



Cust Item ID:

Required Date: 4/15/10 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3535

Rev B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3535

☐ Dwg Rev: B

☐ Prog Rev: B

☐ 2-

Deburr if necessary

B 10-4-12



110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B 10-4-12

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

Siobyliz



Pho ->

W/O: 57528		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/4/12	#120	Took QTY N For QC inspection template	S	10/4/12	4		S 10/4/12

Part No: D3535-35 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57528

April 8, 2010 8:12:05 AM



Page 2

Item ID: D3535-35

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 4/08/10 Start Qty: 10.00



Cust Item ID:

Required Date: 4/15/10 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 Brake NC	NC BRAKE	0.00							
Brake NC	Memo 1-Deburr if necessary □ 2-Form on Brake as per Dwg D3535 using Jigs DT8261 and DT8326. □ 3-Identify as D3535-35.	0.00							
140 QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo	0.00							
150 Powdercoat	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
Powder Coating	Memo START TIME: 7:15AM □ FINISH TIME: 7:45AM □ OVEN TEMPERATURE: 320°F	0.00							

SP 10/04/12

SP 10/04/12

(+10)

⇒ SP 10/04/13

X12 Ø

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57528

April 8, 2010 8:12:06 AM



Page 3

Item ID: D3535-35

Accept



Setup Start



Revision ID:

Stop



Item Name: Wearshoe

Start Date: 4/08/10 Start Qty: 10.00



Cust Item ID:

Required Date: 4/15/10 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

PL

10-4-13

(11)

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location *FP-18*

0.00

W

10/04/13

X 11

Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

10/04/13

QC

Memo

0.00

Quality Control

10-4-13
(11)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April 8, 2010 8:12:04 AM

Page 1

Work Order ID: 57528



Parent Item: D3535-35



Parent Item Name: Wearshoe

Start Date: 4/08/10

Required Date: 4/15/10

Comments: IPP Rev:A New Issue 07-02-15 JLM
IPP Rev:B As per Rev B 07-08-31 JLM

Verified By:EC

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304S20GA		Purchased	No			100	sf	79.0000	8.4442	10.2		



304/316 .040 Sheet



18 10-4-12

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT20

79

112885

15

113062

64

113062

②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 57528
Description: Wearshoe		Part Number: D3535-35
Inspection Dwg: D3535	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.000	+/-0.010	2.002	✓			
1.885	+/-0.010	1.889	✓			
6.00	+/-0.030	6.00	✓			
6.75	+/-0.030	6.75	✓			
Ø0.188	+0.005/-0.001	.191	✓			
23.250	+/-0.010	23.250	✓			
19.750	+/-0.010	19.750	✓			
17.750	+/-0.010	17.750	✓			
14.250	+/-0.010	14.250	✓			
9.500	+/-0.010	9.500	✓			
4.750	+/-0.010	4.750	✓			
0.300	+/-0.010	.303	✓			
0.300	+/-0.010	.304	✓			
0.038	+/-0.010	.036	✓			

Measured by: JB	Audited by: S	Prototype Approval:	N/A
Date: 10-4-12	Date: 10/04/12	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.05.10	New Issue	KJ/JLM	BE



7 deadly wastes

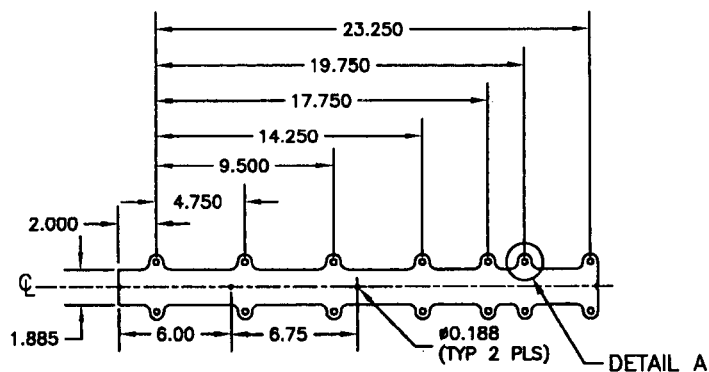
- 1. Overproduction***
- 2. Rework***
- 3. Transportation***
- 4. Inappropriate / over Processing***
- 5. Unnecessary Inventory***
- 6. Delays / Waiting***
- 7. Unnecessary Motions***

DART

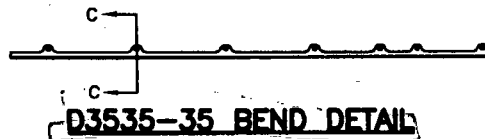
RELEASED

07.04.17

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.	
CB	PH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
<i>[Signature]</i>	<i>[Signature]</i>	D3535	SHEET 5 OF 7
DATE	TITLE	SCALE	
07.04.17	WEARSHOE	1:10	

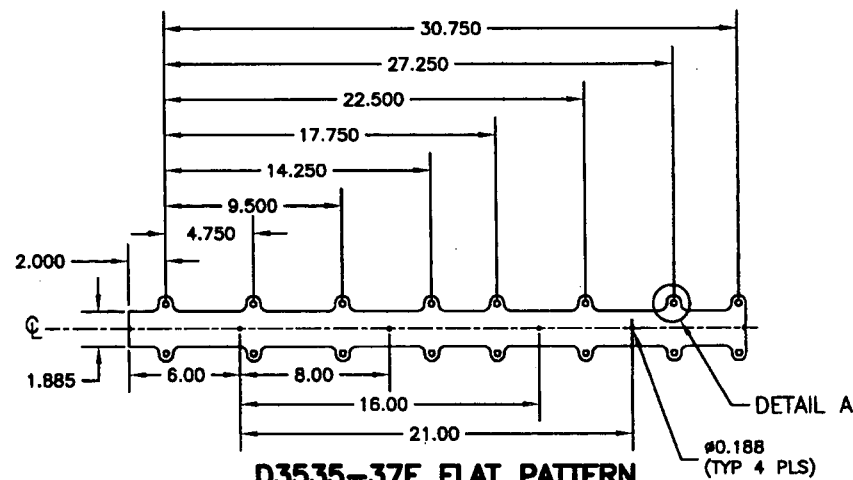


D3535-35F FLAT PATTERN



D3535-35 BEND DETAIL

w/o 51528



D3535-37F FLAT PATTERN



D3535-37 BEND DETAIL

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT C
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION



5S continued...

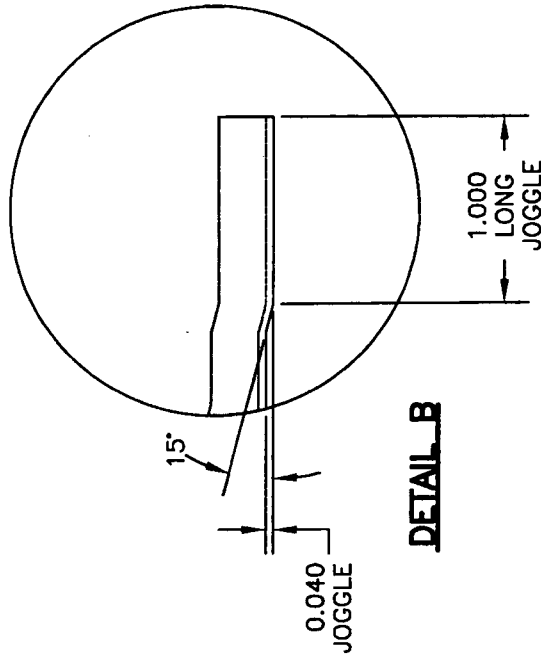
- **Standardize (Seiketsu) (清潔):** Standardizing. This refers to standardized work practices. This means operating in a consistent and standardized fashion. Everyone knows exactly what his or her responsibilities are.
- **Sustain (Shitsuke) (躰):** Sustaining. Refers to maintaining and reviewing standards. Once the previous 4S's have been established they become the new way to operate. Maintain the focus on this new way of operating, and do not allow a gradual decline back to the old ways of operating.



DESIGN CB	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3535	REV. B SHEET 7 OF 7
DATE 07.04.17	TITLE WEARSHOE		SCALE 1:1

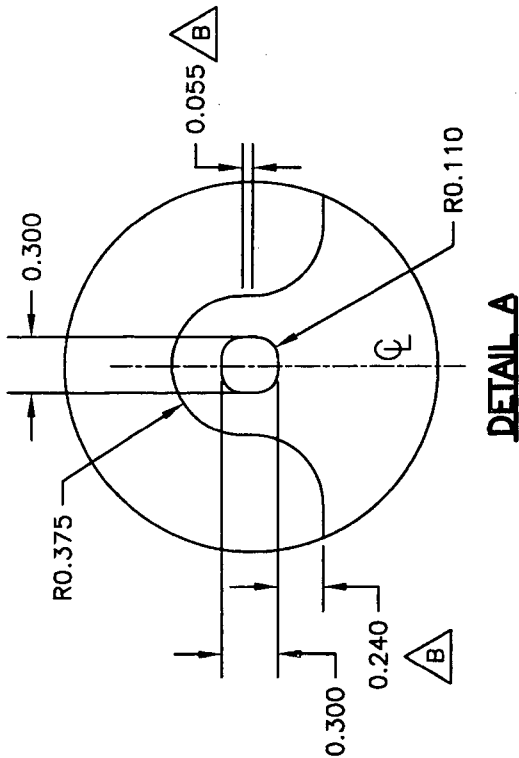
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07.04.24 *[Signature]*

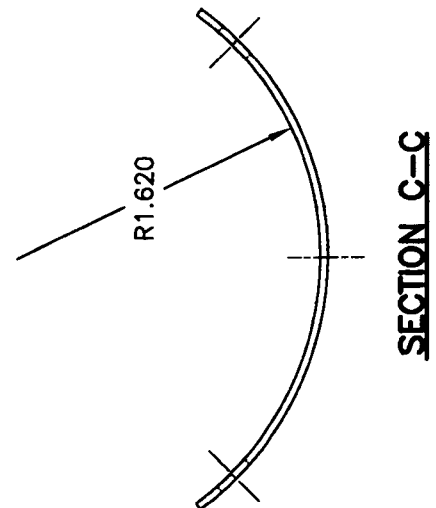


DETAIL B

w/o 51528



DETAIL A



SECTION C-C

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The following chart shows the repeatable 5S system.

5S Flow Chart

